

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-25. (Canceled)

Claim 26. (Currently Amended) Adenoviral particle which lacks a functional native fiber, and comprises:

- (a) a modified fiber according to Claim 1 of an adenovirus, comprising at least one mutation at one or more residues within the region of said fiber stretching from pleated sheet A to pleated sheet B, and including loop AB,
and
- (b) a ligand capable of recognizing a cellular antiligand other than the natural cellular receptor for said particle.

Claim 27. (Currently Amended) Adenoviral particle according to Claim 26, ~~characterized in that~~ wherein said ligand is inserted into an adenoviral capsid protein other than the fibre, ~~in particular the hexon or the penton~~ fiber.

Claims 28-35. (Canceled)

Claim 36. (New) The adenoviral particle according to Claim 27, wherein said adenoviral capsid protein other than the fiber is the hexon.

Claim 37. (New) The adenoviral particle according to Claim 27, wherein said adenoviral capsid protein other than the fiber is the penton.

Claim 38. (New) The adenoviral particle according to Claim 26, wherein:

- (i) said adenoviral particle does not substantially attach to the natural cellular receptors; and
- (ii) said adenoviral particle has a novel tropism for one or more specific cell types carrying, at their surface, said antiligand.

Claim 39. (New) The adenoviral particle according to Claim 38, wherein said specific cell type is selected from the group consisting of a tumor cell, an infected cell, a specific cell type and a category of cells bearing a specific surface marker.

Claim 40. (New) The adenoviral particle according to Claim 26, wherein said ligand is selected from the group consisting of an antibody or an antibody fragment, a peptide, a lipid, a glycolipid, a hormone, a polymer and a sugar.

Claim 41. (New) The adenoviral particle according to Claim 26, wherein said modified fiber comprises at least one mutation at one or more residues within loop AB.

Claim 42. (New) The adenoviral particle according to Claim 26, wherein said modified fiber derives from a fiber of a type 5 adenovirus (Ad5) comprising all or part of the sequence as shown in sequence identifier No. 1 (SEQ ID NO: 1), and comprises at least one mutation at one or more residues of the region between residues 400 and 428.

Claim 43. (New) The adenoviral particle according to Claim 42, wherein said modified fiber comprises at least one mutation at one or more residues of the region between residues 404 and 408 of SEQ ID NO: 1.

Claim 44. (New) The adenoviral particle according to Claim 43, wherein said residue is selected from the threonine residue at position 404, the alanine residue at position 406 and the serine residue at position 408.

Claim 45. (New) The adenoviral particle according to Claim 44, wherein said modified fiber comprises substitution of the serine residue at position 408 with an amino acid residue having at least two carboxyl groups.

Claim 46. (New) The adenoviral particle according to Claim 45, wherein said residue having at least two carboxyl groups is selected from the group consisting of aspartic acid and glutamic acid.

Claim 47. (New) The adenoviral particle according to Claim 44, wherein said modified fiber comprises substitution of the threonine residue at position 404 with a glycine residue and/or substitution of the alanine residue at position 406 with a lysine residue.

Claim 48. (New) The adenoviral particle according to Claim 26, wherein at least one of the mutations is deletion of at least 3 consecutive residues of a loop and/or of a pleated sheet of said region.

Claim 49. (New) The adenoviral particle according to Claim 48, wherein said deleted residues are replaced with residues of an equivalent loop and/or pleated sheet derived from a fiber of a second adenovirus of heterologous type, capable of interacting with a cellular receptor other than that recognized by said first adenovirus.

Claim 50. (New) The adenoviral particle according to Claim 26, wherein said modified fiber also comprises one or more mutations in:

- (i) loops CD, DG, GHI, HI and/or IJ and/or
- (ii) pleated sheets, C, D, G, H, I and/or J.

Claim 51. (New) The adenoviral particle according to Claim 26, which is empty.

Claim 52. (New) The adenoviral particle according to Claim 26, which contains an adenoviral genome.

Claim 53. (New) The adenoviral particle according to Claim 52, wherein said adenoviral genome is a replication-defective recombinant adenoviral genome.